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Remarks:

Amendments to the claims:

Claims 1-13 are pending in this application. By this Amendment, claims 8 and 9 are amended and new claims 10-13 are added. Claim 8 is amended to correct a grammatical error.

No new matter is added to the application by this Amendment. Support for new claims 10 and 11 can be found in the specification, as originally filed, at, for example, the paragraph bridging pages 5 and 6. New claims 12 and 13 find support in claims 1 and 9.

Regarding the rejection of claim 9 under 35 USC 102(b) as allegedly being anticipated by EP 682942 to Katsuma et al. (hereinafter "Katsuma"):

Applicants traverse the Examiner's rejection of claim 9 as allegedly being anticipated by Katsuma.

The Patent Office alleges that Katsuma discloses each and every feature of claim 9 because Katsuma teaches an oil-in-water emulsion comprising 1-50% of a terpene such as spearmint oil. Applicants respectfully disagree with these allegations.

Prior to discussing the relative merits of the Examiner's rejection, the applicant points out that unpatentability based on "anticipation" type rejection under 35 USC 102(b) requires that the invention is not in fact new. See *Hoover Group, Inc. v. Custom Metalcraft, Inc.*, 66 F.3d 299, 302, 36 USPQ2d 1101, 1103 (Fed. Cir. 1995) ("lack of novelty (often called 'anticipation') requires that the same invention, including each element and limitation of the claims, was known or used by others before it was invented by the patentee"). Anticipation requires that a *single reference* [emphasis added] describe the claimed invention with sufficient precision and detail to establish that the subject matter existed in

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the prior art. See, *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990).

The principle of "inherency," in the law of anticipation, requires that any information missing from the reference would nonetheless be known to be present in the subject matter of the reference, when viewed by persons experienced in the field of the invention. However, "anticipation by inherent disclosure is appropriate only when the reference discloses prior art that must necessarily include the unstated limitation, [or the reference] cannot inherently anticipate the claims." *Transclean Corp. v. Bridgewood Servs., Inc.*, 290 F.3d 1364, 1373 [62 USPQ2d 1865] (Fed. Cir. 2002); *Hitzeman v. Rutter*, 243 F.3d 1345, 1355 [58 USPQ2d 1161] (Fed. Cir. 2001) ("consistent with the law of anticipation, an inherent property must necessarily be present in the invention described by the count, and it must be so recognized by persons of ordinary skill in the art"); *In re Robertson*, 169 F.3d 743, 745 [49 USPQ2d 1949] (Fed. Cir. 1999) (that a feature in the prior art reference "could" operate as claimed does not establish inherency).

Thus when a claim limitation is not explicitly set forth in a reference, evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co.*, 948 F.2d at 1268. It is not sufficient if a material element or limitation is "merely probably or possibly present" in the prior art. *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 [63 USPQ2d 1597] (Fed. Cir. 2002). See also, *W.L. Gore v. Garlock, Inc.*, 721 F.2d at 1554 (Fed. Cir. 1983) (anticipation "cannot be predicated on mere conjecture respecting the characteristics of products that might result from the practice of processes disclosed in references"); *In re Oelrich*, 666 F.2d 578, 581 [212 USPQ 323] (CCPA 1982) (to anticipate, the asserted inherent function must be present in the prior art).

Nowhere does Katsuma teach or suggest an allergen-deactivating oil-in-water emulsion comprising at least 8% weight of a volatile deactivant wherein the deactivant is selected

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from oil of jasmine, oil of bergamot, oil of lemon grass or a component thereof as required by amended claim 9.

The oil-in-water emulsion allegedly comprising 1-50% of a terpene according to Katsuma fails to teach or suggest the present deactivant as recited in claim 9. Thus, Katsuma fails to teach or suggest the presently claimed invention.

Because the features of independent claim 9 are neither taught nor suggested by Katsuma, Katsuma cannot anticipate, and would not have rendered obvious, the features specifically defined in claim 9.

For at least these reasons, claim 9 is patentably distinct from and/or non-obvious in view of Katsuma. Reconsideration and withdrawal of the rejections of the claims under 35 U.S.C. §102(b) are respectfully requested.

Regarding the rejection of claims 1-5 and 8 under 35 USC 103(a) as being unpatentable over WO 01/76371 to McKechnie et al. (hereinafter "McKechnie") in view of U.S. Patent No. 5,635,132 to Blanc:

Applicants respectfully traverse the rejection of the foregoing claims in view of McKechnie further in view of Blanc.

Prior to discussing the merits of the Examiner's position, the undersigned reminds the Examiner that the determination of obviousness under § 103(a) requires consideration of the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1 [148 USPQ 459] (1966): (1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the pertinent art; and (4) secondary considerations, if any, of nonobviousness. *McNeil-PPC, Inc. v. L. Perrigo Co.*, 337 F.3d 1362, 1368, 67 USPQ2d 1649, 1653 (Fed. Cir. 2003). There must be some suggestion, teaching, or motivation arising from what the prior art would have taught a person of

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ordinary skill in the field of the invention to make the proposed changes to the reference. *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). But see also *KSR International Co. v. Teleflex Inc.*, 82 USPQ2D 1385 (U.S. 2007).

A methodology for the analysis of obviousness was set out in *In re Kotzab*, 217 F.3d 1365, 1369-70, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000). A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher."

It must also be shown that one having ordinary skill in the art would reasonably have expected any proposed changes to a prior art reference would have been successful. *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1207, 18 USPQ2d 1016, 1022 (Fed. Cir. 1991); *In re O'Farrell*, 853 F.2d 894, 903-04, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988); *In re Clinton*, 527 F.2d 1226, 1228, 188 USPQ 365, 367 (CCPA 1976). "Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure." *In re Dow Chem. Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988).

The Patent Office alleges that the combination of McKechnie and Blanc teaches or suggests each and every feature of claims 1-5 and 8. Specifically, the Patent Office acknowledges that McKechnie only teaches using terpene in an amount of 5%. The Patent Office introduces Blanc as allegedly teaching that essential oils may be used in an amount up to 20% of the composition. The Patent Office alleges that (a) it would have been obvious to increase the amount of terpene-containing essential oil in the oil-in-water emulsion of McKechnie where the level of dust mite allergens was very large as Blanc

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evidences the safety of using essential oils at high concentrations, (b) it is further noted that concentration is a known result effective variable, and (c) it is within the purview of one in the art to optimize the concentration of the essential oil in McKechnie as being a result effective variable. Applicants respectfully disagree with these allegations.

Neither McKechnie nor Blanc, taken singly or in combination, teaches or suggests a method comprising dispersing into an airspace an allergen-deactivating amount of an allergen-deactivating compound, the compound being provided in the form of an oil-in-water emulsion comprising at least 8% weight of a deactivant, the emulsion being dispersed into the airspace as a vapour as required by amended claim 1. Additionally, McKechnie and Blanc, taken singly or in combination, fails to teach or suggest a method comprising providing an oil-in-water emulsion, an allergen deactivant present in a concentration of 10-15% wt./wt. of emulsion, and heating the emulsion with a heat source to accelerate the vaporization of the deactivant as recited in claim 8.

As set forth above, McKechnie, at best, teaches that a volatile oil may be used in the form of an emulsion comprising up to 5% by weight of the oil (see page 4, lines 30-33 of McKechnie).

On the other hand, Blanc teaches a process for decontamination and detoxification of a room with a true aerosol diffused from the center of the room, whereby the true aerosol contains up to 20% essential oils and aromatic essences. Specifically, col. 3, lines 41-67

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of Blanc discloses:

One solution to the problem raised, within the scope of the present invention, is that of preparing each room of said dwelling so that all the elements of furniture which compose it are exposed to the ambient air of said room; closing all the outer openings thereof; diffusing said product as a true aerosol from the centre of the room in particles of 0.2 to 2 microns maximum for a sufficient period of time; thus treating, with the mist emitted and composed of said particles of product, all the volume of air of the room in question and all the exposed surfaces; then stopping the diffusion of said product, keeping the room in question closed for a duration sufficient for the product to act, before airing said room; cleaning the surfaces with a simple, damp wipe.

Said product used is preferably a rich formulation of ten constituents and which contains in particular essential oils such as essential oil of lilac, essential oil of lemon, essential oil of citronella, aromatic essences such as terpineol for a percentage of about 20% grouping together all the essential oils and aromatic essences, and phenolic derivatives of natural origin, such as benzoic acid, salol and thymol for a minimum of 4%, and antiseptic products such as triclosan for about 0.2% of the total composition, all these components being in solution in an aliphatic solvent likewise of natural origin, for the remaining 70 to 76%.

Applicants submit that Blanc fails to remedy the deficiencies of McKechnie because Blanc discloses a true aerosol contains up to 20% essential oils and aromatic essences and does not teach or suggest an oil-in-water emulsion comprising at least 8% weight of a deactivant as required by claim 1 or an allergen deactivant present in a concentration of 10-15% wt./wt. of emulsion as required by claim 8.

Applicants also submit that one of ordinary skill in the art would not modify McKechnie with Blanc because McKechnie is directed to emulsions and Blanc is not directed to emulsions but instead is directed to true aerosols. One of ordinary skill in the art would

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not turn to the true aerosol teachings according to Blanc to modify the emulsion teachings of McKechnie.

The true aerosol containing up to 20% essential oils and aromatic essences according to Blanc does not teach or suggest an oil-in-water emulsion comprising at least 8% weight of a deactivant or an allergen deactivant present in a concentration of 10-15% wt./wt. of emulsion as required by claims 1 and 8, respectively. Thus, even if one or ordinary skill in the art did modify McKechnie with Blanc, as alleged by the Patent Office, the resulting combination would fail to achieve the presently claimed invention because neither McKechnie nor Blanc teach or suggest an oil-in-water emulsion having a deactivant in an amount greater 5% weight.

Because these features of independent claims 1 and 8 are not taught or suggested by McKechnie and Blanc, taken singly or in combination, these references would not have rendered the features of claims 1 and 8 obvious to one of ordinary skill in the art.

In view of the foregoing, reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of claim 6 under 35 USC 103(a) as being unpatentable over McKechnie and Blanc in view of WO 03/070286 to Franklin et al. (hereinafter "Franklin")):

Applicants respectfully traverse the rejection of the foregoing claim in view of McKechnie, Blanc and Franklin.

The Patent Office acknowledges that McKechnie and Blanc do not teach or suggest use of β -pinene as the deactivant (see page 4 of the Office Action). The Patent Office introduces Franklin as allegedly teaching a composition containing water, a surfactant and pinene as a terpene. The Patent Office alleges that it would have been obvious to use pinene as the terpene of McKechnie since Franklin has evidenced its effectiveness against

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a variety of airborne contaminants, including dust mite allergens. Applicants respectfully disagree with these allegations.

Franklin fails to remedy the deficiencies of McKechnie and Blanc as set forth above with respect to claim 1, from which claim 6 depends, because Franklin does not teach or suggest an oil-in-water emulsion comprising at least 8% weight of a deactivant as required by claim 1.

Thus, none of McKechnie, Blanc and Franklin, taken singly or in combination, teaches or suggests a method comprising dispersing into an airspace an allergen-deactivating amount of an allergen-deactivating compound, the compound being provided in the form of an oil-in-water emulsion comprising at least 8% weight of a deactivant, the emulsion being dispersed into the airspace as a vapour as recited in claim 1, from which claim 6 depends.

Because these features of independent claims 1 are not taught or suggested by McKechnie, Blanc and Franklin, taken singly or in combination, these references would not have rendered the features of claim 6 obvious to one of ordinary skill in the art.

In view of the foregoing, reconsideration and withdrawal of this rejection are respectfully requested.

Regarding the rejection of claim 7 under 35 USC 103(a) as being unpatentable over McKechnie and Blanc in view of U.S. Patent No. 6,500,445 to Pullen:

Applicants respectfully traverse the rejection of the foregoing claim in view of McKechnie, Blanc and Pullen.

The Patent Office acknowledges that McKechnie and Blanc do not teach or suggest use of orange oil as the deactivant (see page 4 of the Office Action). The Patent Office introduces Pullen as allegedly teaching a composition containing orange oil as a terpene-

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containing essential oil. The Patent Office alleges that it would have been obvious to use orange oil as the terpene-containing essential oil of McKechnie since Pullen teaches that terpene-containing essential oils such as orange oil are effective, non-toxic pesticides for dust mites. Applicants respectfully disagree with these allegations.

Pullen fails to remedy the deficiencies of McKechnie and Blanc as set forth above with respect to claim 1, from which claim 7 depends, because Pullen does not teach or suggest an oil-in-water emulsion comprising at least 8% weight of a deactivant as required by claim 1.

Thus, none of McKechnie, Blanc and Pullen, taken singly or in combination, teaches or suggests a method comprising dispersing into an airspace an allergen-deactivating amount of an allergen-deactivating compound, the compound being provided in the form of an oil-in-water emulsion comprising at least 8% weight of a deactivant, the emulsion being dispersed into the airspace as a vapour as recited in claim 1, from which claim 6 depends.

Because these features of independent claims 1 are not taught or suggested by McKechnie, Blanc and Pullen, taken singly or in combination, these references would not have rendered the features of claim 7 obvious to one of ordinary skill in the art.

In view of the foregoing, reconsideration and withdrawal of this rejection are respectfully requested.

Regarding new claims 12 and 13:

The references of record, taken singly or in combination, fail to teach or suggest a method of deactivating an allergen from the mite species *Der f1* or *Der p1*, the method comprising dispersing into an airspace an allergen-deactivating amount of an allergen-deactivating compound, wherein the allergen-deactivating compound being provided in the form of an oil-in-water emulsion comprising at least 8% weight of a deactivant,

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wherein the oil-in-water emulsion being dispersed into the airspace as a vapour, wherein the oil-in-water emulsion comprises a non-ionic surfactant as an essential constituent of the oil-in-water emulsion as recited in new claim 12.

Moreover, the references of record, taken singly or in combination, fail to teach or suggest the method according to claim 12, wherein the deactivant is selected from oil of jasmine, oil of bergamot, oil of lemon grass or a component thereof as required by new claim 13.

Should the Examiner in charge of this application believe that telephonic communication with the undersigned would meaningfully advance the prosecution of this application, they are invited to call the undersigned at their earliest convenience. The early issuance of a *Notice of Allowability* is solicited.

PETITION FOR A ONE-MONTH EXTENSION OF TIME

The applicants respectfully petition for a one-month extension of time in order to permit for the timely entry of this response. The Commissioner is hereby authorized to charge the fee to Deposit Account No. 14-1263 with respect to this petition.

CONDITIONAL AUTHORIZATION FOR FEES

Should any further fee be required by the Commissioner in order to permit the timely entry of this paper, including any extension of time fees, the Commissioner is authorized to charge any such fee to Deposit Account No. 14-1263.

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Respectfully Submitted;

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CERTIFICATION OF TELEFAX TRANSMISSION:

I hereby certify that this paper and all attachments thereto is being telefax transmitted to the US Patent and Trademark Office to telefax number: 571 273-8300 on the date shown below:

Allyson Ross
Allyson Ross

05 Jan 2009
Date:

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